SERVICE MANUAL

SANYO

CASSETTE DECK
RECORDER

RD7058

(Europe/SCAN)

SPECIFICATIONS

CASSETTE SECTION

Recording System	AC bias, 1/4 track
Erasing System	AC erasing, 1/2 track
Tape Speed	4.75cm/sec. (1-7/8 ips)
Rewind and Fast Forward time	100 sec. (C-60)
Wow & Flutter (Play, Weighted)	0.1%
Speed Accuracy (Play)	0.08%
Frequency Response (±7dB, Record/Playback, Dolby ON)	Normal tape : 35-15000 Hz CrO_2 tape : 35-17000 Hz FeCr tape : 30-17000 Hz
Harmonic Distortion (Record/Playback, Dolby OFF)	Normal tape : 1.5% CrO_2 tape : 2.5% FeCr tape : 1.5%
Signal to Noise ratio (Record/Playback, Weighted, Dolby ON)	Normal tape : 55dB CrO_2 tape : 60dB FeCr tape : 60dB
Channel Separation (Record/Playback)	45dB
Signal Crosstalk (Record/Playback)	70dB
Erase Ratio	70dB
Input Sensitivity/Impedance	MIC : 0.26mV/1.5kohms LINE : 100mV/100kohms DIN : 2.5mV/12kohms
Output Level/Impedance	LINE : 1.5V/7kohms DIN : 1.3V/16kohms PHONES : 56mV/8ohms
Limiter Operation (1kHz) (Increase of LINE INPUT signal from 0.1V to 1V)	Increase of LINE OUTPUT Level 6dB
Oscillator Frequency	80kHz
Motor	Capstan Drive : DC Servo Take up Reel Drive : DC Governer

GENERAL

Dimensions	(W) 440 × (H) 135 × (D) 320mm (17-3/8″ × 6-1/4″ × 12-5/8″)
Weight	7.5kg
Power Source	AC 110/120/220V, 50/60Hz
Power consumption	30W

ALIGNMENT PROCEDURES

ADJUSTMENT OF CLOCK PULSE OSCILLATION FREQUENCY

1. Connect the + terminal cord of the frequency counter to first pin of IC-1 and the −(or ground) terminal cord to earth pattern.
2. Turn Coil OSC-1 to the position where the frequency counter reading becomes 400 kHz ±5kHz.

ADJUSTMENT OF REEL-MOTOR'S TORQUE

1. Play the torque measurement tape.
2. Turn the vertical type SVR in governor circuit, that is behind the cassette mechanism, to the position where the scale reading on the torque measurement tape becomes 50 g-cm.

HEAD AZIMUTH ADJUSTMENT

1. Use the test tape MTT-113 or other equivalent test tape which contains the signal for AZIMUTH ADJUSTMENT on it's truck.
2. Connect the VTVM to the right or left LINE OUT terminal.
3. Play the test tape.
4. Adjust R/P head angle adjusting screw for maximum output level readings VTVM.
5. After adjustment, lock angle adjusting screw with lacquer.

PLAYBACK GAIN ADJUSTMENT AND LEVEL METER ADJUSTMENT

1. Use test tape MTT-150 (DOLBY LEVEL CALIBRATION TAPE) and connect VTVM to TP-111 and TP-211 by turns.
2. Play the tape.
3. Turn SVR-111 and SVR-211 to the position where the VTVM readings become 580 mV respectively for the left and right channels.
4. Then, turn SVR-113 and SVR-213 to the positions where the LEVEL METER readings become +3dB with each channel.

BIAS ADJUSTMENT

1. Set the unit in the record mode.
2. Set the tape select switch in NORMAL tape position.
3. Set the DOLBY NR and LIMITER switches to OFF.
4. Connect the VTVM between j 101 andj 103 (GROUND).
5. Turn the trap coil L-111 to the position where the VTVM reading becomes maximum.
6. After finishing above Step 5, turn the SVR-102 to the position where the VTVM reading becomes 3.2 mV.
7. Repeat above Steps 4 to 6 on the Left channel.
   Connecting point on the Left channel is j 106 and j 104 (GROUND).

RECORDING LEVEL ADJUSTMENT

1. Supply 400Hz signal from AF OSC through ATT to LINE INPUT terminal, and set the level to 250mV.
2. Set the unit in the record mode, and set the switches following as below.
   TAPE SELECT switch ····· NORMAL position
   DOLBY NR switch ····· OFF position
   LIMITER switch ····· OFF position
3. Push the PAUSE button. Turn the R-channel and L-channel REC level controls to the positions where the outputs at TP-111 and TP-211(third pins of IC-111 and IC-211 respectively) are 400 mV respectively.
4. Note the output levels at the collectors of Q-114 and Q-214 (which correspond to TP-112. and TP-212 respectively).
5. Record and play back the tape repeatedly and compare the output at TP-111, TP-211 with 400 mV reading obtained in Step 3.
   Note the difference in dB.
6. Set the unit in the record mode again and push the PAUSE button.
   Turn SVR-112 and SVR-212 so as to increase or decrease the output levels at the collectors of Q-114 and Q-214 (TP-112 and TP-212 respectively) by the difference between Steps 4 and 5.
7. Record and play back the tape again. Make sure that the playback levels at TP-111 and TP-211 are 400 mV±1dB.
8. If the levels fail to fall within the range specified in Step 7, go back through Steps 5, 6 and 7 again.

CIRCUIT DESCRIPTION

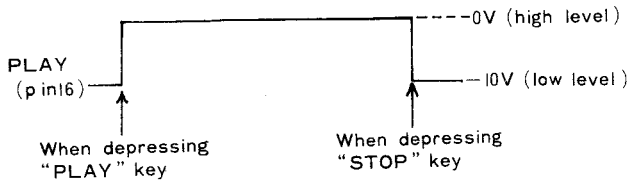
1. Outline of logic LSI (IC1-μPD547C)
   This LSI is a microcomputer providing controls for feather-touch keys, clocks and timers.
   The signal control inside the LSI depends on the 400 kHz (±5 kHz) pulses generated by OSC-1, C9 and C10.

No.	IN	OUT	DESCRIPTION
1	CL1		Clock pulse adjustment (400 kHz)
2		T1	Key input timing pulse (CLOCK/TIMER/COUNTER)
3		T2	Key input timing pulse (MEMO REW/TIME SET)
4		T3	Key input (COUNT RES/50·60Hz) and digit timing pulse
5		T4	Key input (REC·ST/PLAY·ST) and digit timing pulse (AM/PM/COUNT)
6	$\overline{INT}$		Tape counter pulse
7	ICA		Initial clearance signal
8		T5	Key input (MINUTE/HOUR) and digit timing pulse
9		T6	Key input (STOP/PLAY/FF/REW) and digit timing pulse
10		T7	Key input (PAUSE/REC) and digit timing pulse
11		T8	Digit timing pulse
12		E_0	Power control signal
13			
14			
15			

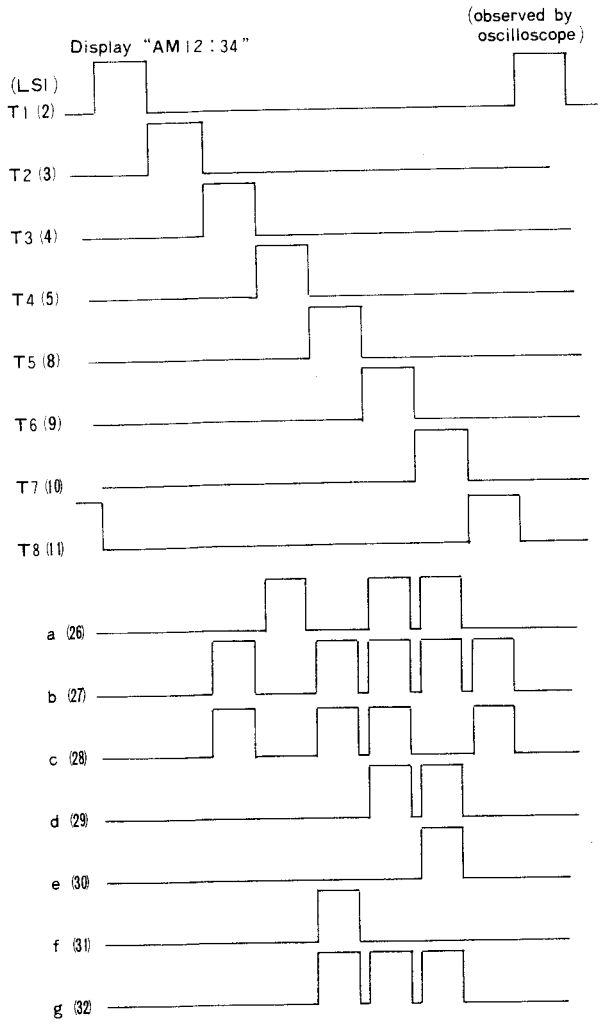
No.	IN	OUT	DESCRIPTION
16		PLAY	Play operation signal
17			
18			
19			
20	GND		(0V)
21	GND		(0V)
22		REC	Recording operation signal
23		PAUSE	Pause operation signal
24		FF	Fast forward operation signal
25		REW	Rewinding operation signal
26		a	Segment display signal a
27		b	〃 b
28		c	〃 c
29		d	〃 d
30		e	〃 e
31		f	〃 f
32		g	〃 g
33	A_0		Key input signal
34	A_1		〃
35	A_2		〃
36	A_3		〃
37	B_0		Pulse for clock
38	AR2		Tape location signal
39	AR1		Tape recording signal
40	B_3		Power detecting terminal
41	V_{GG}		(−10V)
42	CL_0		Clock pulse adjustment (400kHz)

CIRCUIT DESCRIPTION

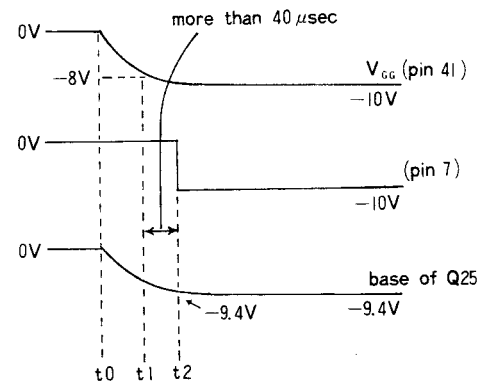
2. How to input key switches ($S_{9-A\ thru\ F}$, $S_{10-B'}$, $S_{11-B'}$, S_{13} thru S_{21}) into LSI
   These seventeen key switches are divided into eight timings T_1 thru T_8 and are input into the LSI through four input lines (A_0 thru A_3). (See display timing waveform.)
3. Output of LSI
   (1) Output for cassette mechanism controls (PLAY, REC, PAUSE, FF, REW)



   PLAY terminal outputs the waveform above.
   REC, PAUSE, FF or REW also outputs the same waveform as above on the respective terminal.
   (2) Display output (T_1 thru T_8, a thru g)
   The dynamic pulse lighting system is used in the LED time display.
   The time display device is a kind of light emitting diode, feeding digital signals (T_3 thru T_8), which are inverted, to common cathode and segment signals (a thru g) into the anodes.



   (3) AC outlet power
   If the present time coincides with the time preset by the timer, E_0 (pin 12) becomes high level and transistor Q39 is switches on, permitting current to flow into relay 1 and relay 2.
   Power is supplied to the r/p circuit through relay 1, and to the AC outlet thru relay 2.
   When the power switch (S22) is manually turned on, Q39 remains off, and current flows into relays 1 and 2 to supply power.
4. Circuit description
   (1) Tape counter
   When the six-pole magnet which is linked with the take-up reel shaft by belt rotates, pulses are generated in a nearby Hall IC (IC-2, DN838). These pulses are shaped through Q1 and fed into terminal $\overline{INT}$ (pin 6) of LSI to count up the tape position.
   By pressing the counter switch (S20), the counter display diode illuminates and the count figure is displayed at the same time.
   (2) LSI initial clear
   The LSI is cleared by utilizing the rise waveform of V_{GG} which appears when the AC cord is put into a wall outlet.



t0 : inserting AC cord to AC outlet
t1 : LSI is on,
t2 : Q25 is on,

   (3) Timer stand-by display circuit
   When loaded with a cassette tape, switches S24 and S26 turn on to bring AR2 (pin 38) to high level, so that the tape play actions are possible.
   When the cassette keeps pawls on its back, S25 is turned on and AR1 (pin 39) becomes high level so that recording can be started at any moment.
   By pressing the PLAY STAND BY switch (S11) with a tape loaded, because B3 (pin 40) is high level, and Q39 and S22 remain off, Q2 is switches on to illuminate D6 which is the PLAY STAND BY lamp.
   When the time preset by the timer terminates, E_0 (pin 12) becomes high level, Q39 is turned on and current starts to flow into relays 1 and 2 so as to supply power into circuits. As Q39 switches on, B3 (pin 40) becomes low level, but, since E_0 (pin 12) is high level, Q2 remains on by way of

CIRCUIT DESCRIPTION

D54 so that D6 keeps lighting.

If the power switch (S22) is turned on before the timer expires, B3 becomes low level, Q2 goes off, and D6 is put out to show power is supplied manually.

(4) Cassette mechanism control circuit

The cassette mechanism can be operated in the following procedure.

1. Move the slide base forward, on which the head is mounted.
2. Hold the slide base in position to keep the head in close contact with the tape.
3. Rotate the capstan motor to let the tape run.
4. Rotate the reel motor to take up the tape being sent off.

Now, press PLAY key, then PLAY (pin 16) becomes high level, Q11 is on, and a negative pulse is delivered to D31, S23, R43, C13 and base of Q27 sequentially to switch on Q27 of monostable multivibrator. And Q26 is also turned on. A current starts to flow into the pull-plunger. Consequently the plunger pushes the slide base forward to bring the head in tight contact with the tape. Simultaneously, S23 which is interlocked with the slide base will be changed over to turn on Q30. And Q29 is also turned on. A current starts to flow into the hold-plunger to lock the slide base. About a second later, the monostable multivibrator automatically restore the original state, turning off Q27 and switching on Q28, so that Q26 is cut off, and the pull plunger stops its attracting operation.

When FF or REW key is depressed, only the hold-plunger operates.

Transistor Q10 is a signal driving one for audio muting; C15 and C17 are responsible for storing and supplying energy on the moment of plunger turn-on.

When REC key is pushed, Q31 and Q32 are switched on to actuate the REC-plunger. Its function is similar to that of hold-plunger.

(5) Motor driving circuit

Press PLAY key, then PLAY (pin 16) becomes high level, Q11 is switched on, and Q38 is also turned on through D24 to rotate the capstan motor.

On the other hand, Q37 is also turned on through D28, and a high level is given to terminal A of reel motor to switch on Q35. Accordingly, the current flows in sequence, thus: Q37, (A) reel motor (D), Q35, D32, (C), (B), R53, and −12 V.

By utilizing the character of the internal resistance in Q_c (on cassette mechanism PCB) that changes, the potential between (C) and (B) is kept constant by means of the current divided by the 200-ohm resistor so as to hold down the fluctuations of torque and speed of reel motor.

When REW key is pressed, Q6 is turned on, and Q36 and Q34 also become on. On the other hand, Q47 is also switched on by way of D25 to make Q33 on also, accordingly. And the current flows from Q36 to (D) reel motor (A), Q34, Q33, R53 and up to −12V, so that the reel motor runs in the direction reverse to that in PLAY mode.

A press on FF key will cause the current to flow in this way: Q37, (A) reel motor (D), Q35, Q33, R53, and −12V.

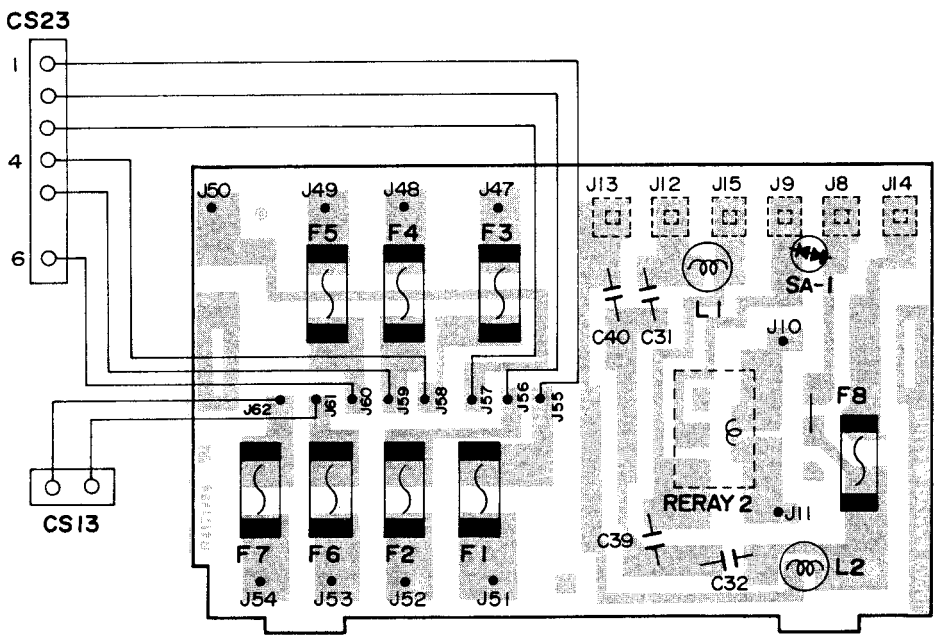
When PAUSE key is depressed, Q8 is turned on, so is Q38 and the capstan motor keeps running.

5. Clock operation

The line frequency is shaped by Q43 by way of D45 and is applied to B_0 (pin 37) of LSI. The frequency is counted inside the LSI to operate the clock.

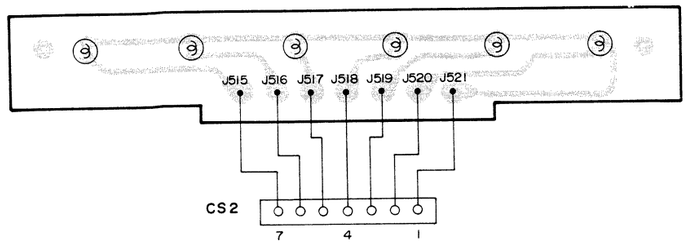
WIRING DIAGRAM

POWER SUPPLY P.C.B. Bottom

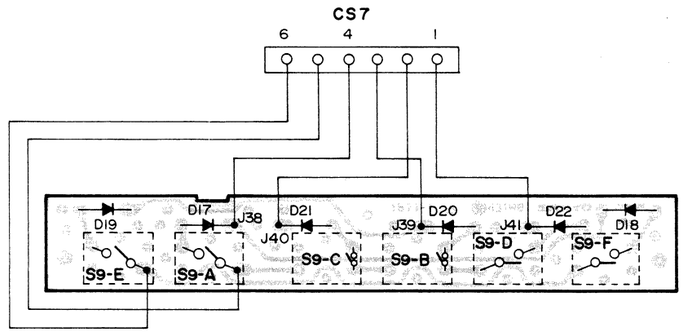


WIRING DIAGRAM

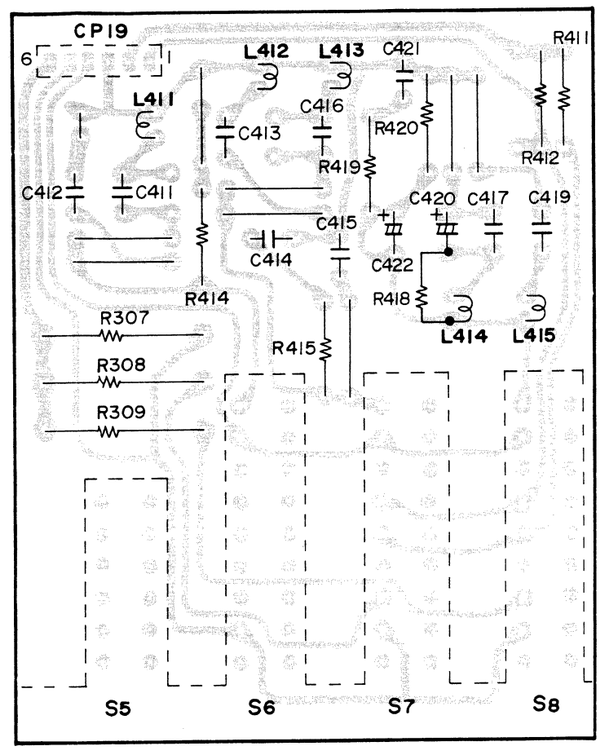
PL P.C.B. Bottom



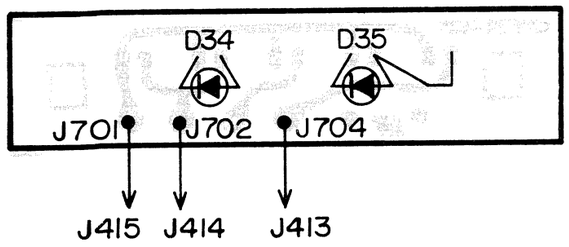
KEY SW P.C.B. Bottom



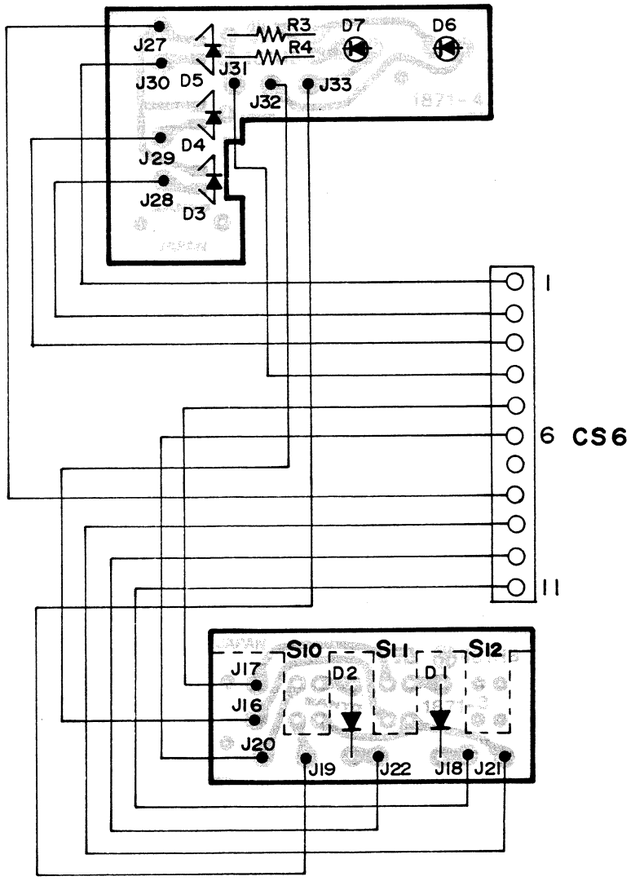
R-CH REC EQ P.C.B. Bottom



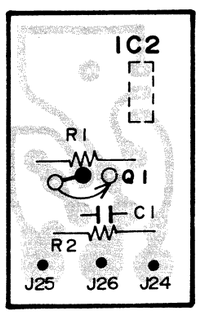
DIGITAL P.C.B. Bottom



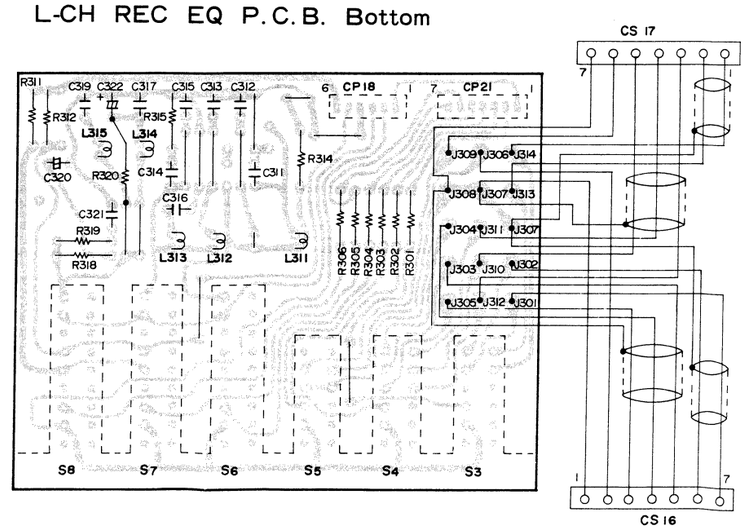
ILLUMINATION P.C.B. Bottom



COUNTER P.C.B. Bottom



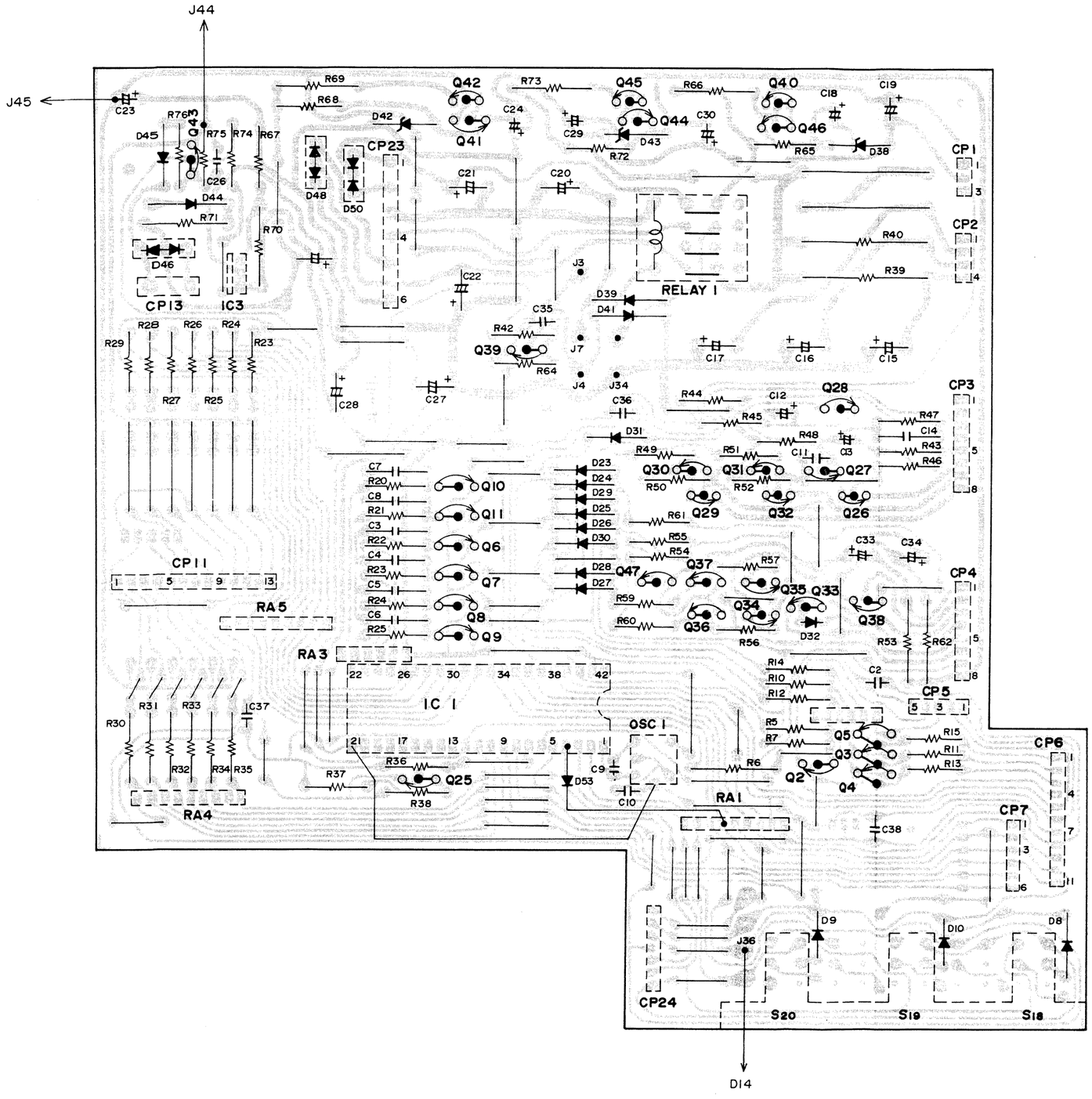
L-CH REC EQ P.C.B. Bottom



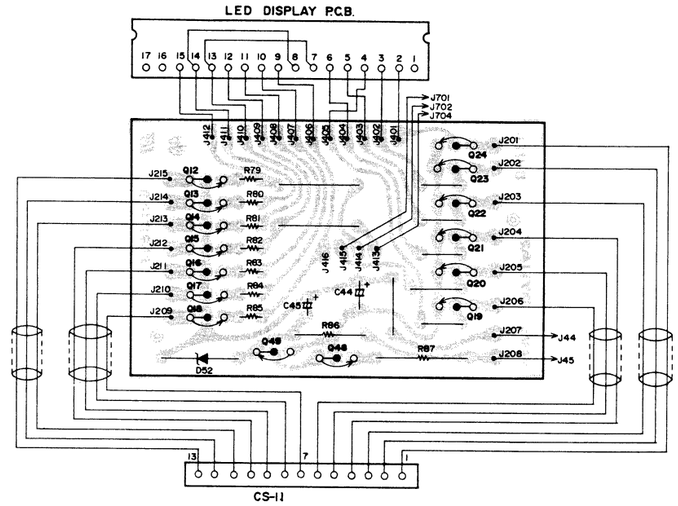
SW P.C.B. Bottom

WIRING DIAGRAM

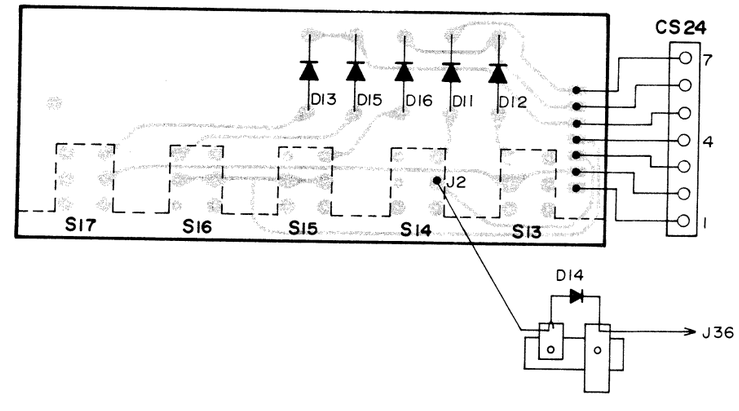
MAIN LOGIC P.C.B. Bottom



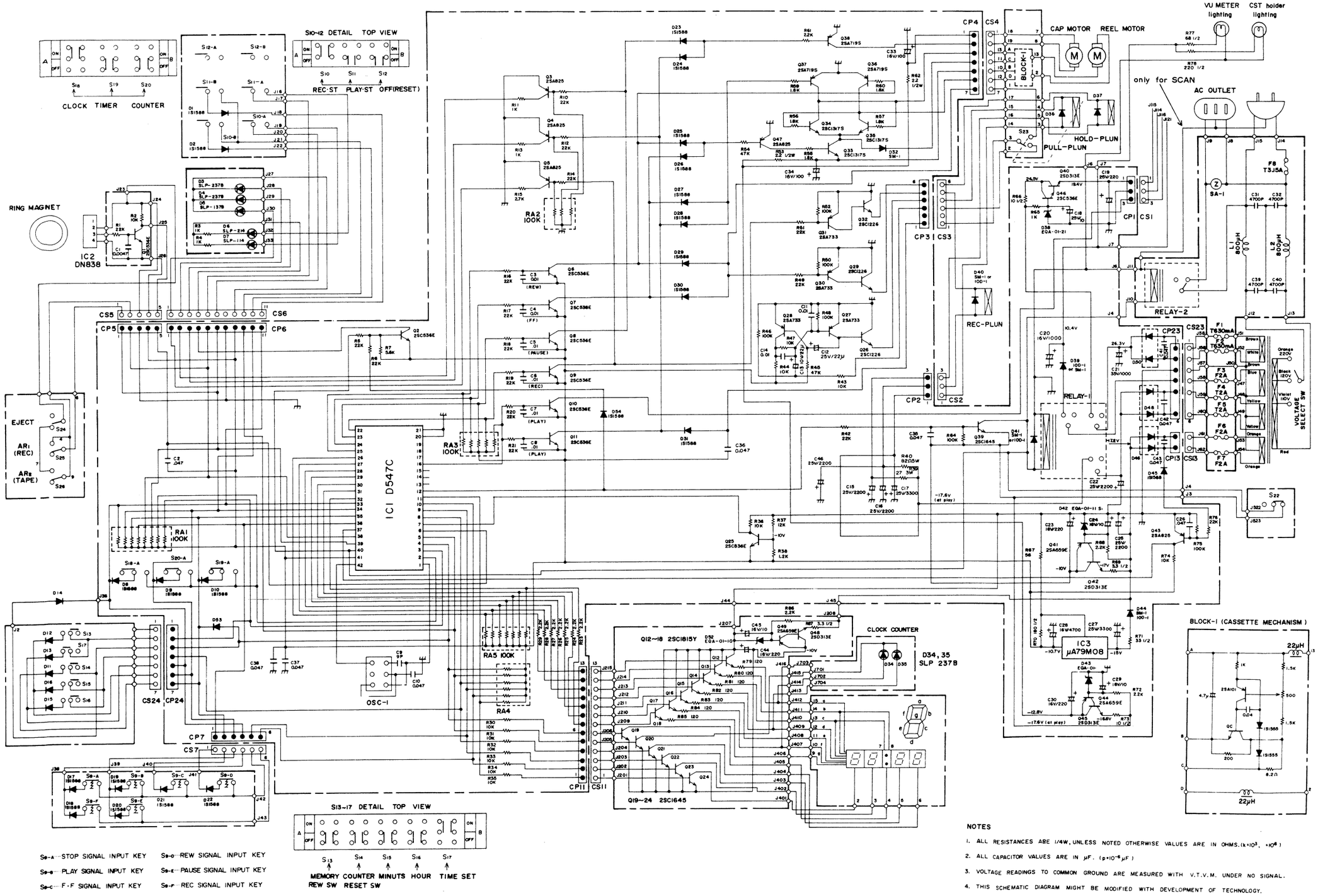
DISPLAY DRIVE P.C.B. Bottom



CONTROL P.C.B. Bottom



SCHEMATIC DIAGRAM



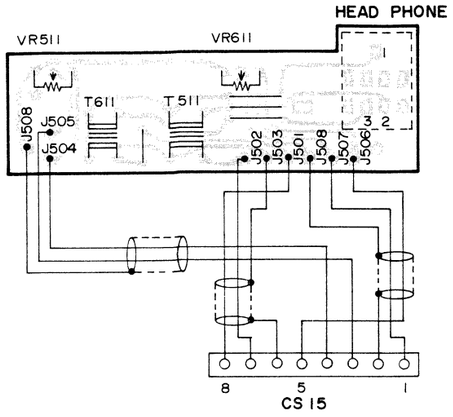
S9-A···STOP SIGNAL INPUT KEY
S9-B···PLAY SIGNAL INPUT KEY
S9-C···F·F SIGNAL INPUT KEY
S9-D···REW SIGNAL INPUT KEY
S9-E···PAUSE SIGNAL INPUT KEY
S9-F···REC SIGNAL INPUT KEY

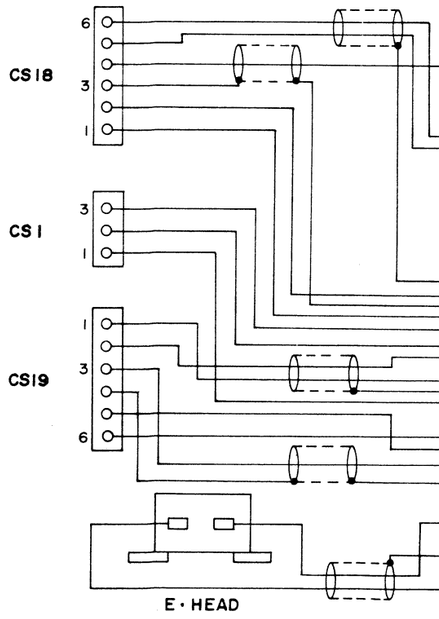
NOTES

1. ALL RESISTANCES ARE 1/4W, UNLESS NOTED OTHERWISE VALUES ARE IN OHMS. (k=10^3, M=10^6)
2. ALL CAPACITOR VALUES ARE IN μF. (p=10^{-6}μF)
3. VOLTAGE READINGS TO COMMON GROUND ARE MEASURED WITH V.T.V.M. UNDER NO SIGNAL.
4. THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY.

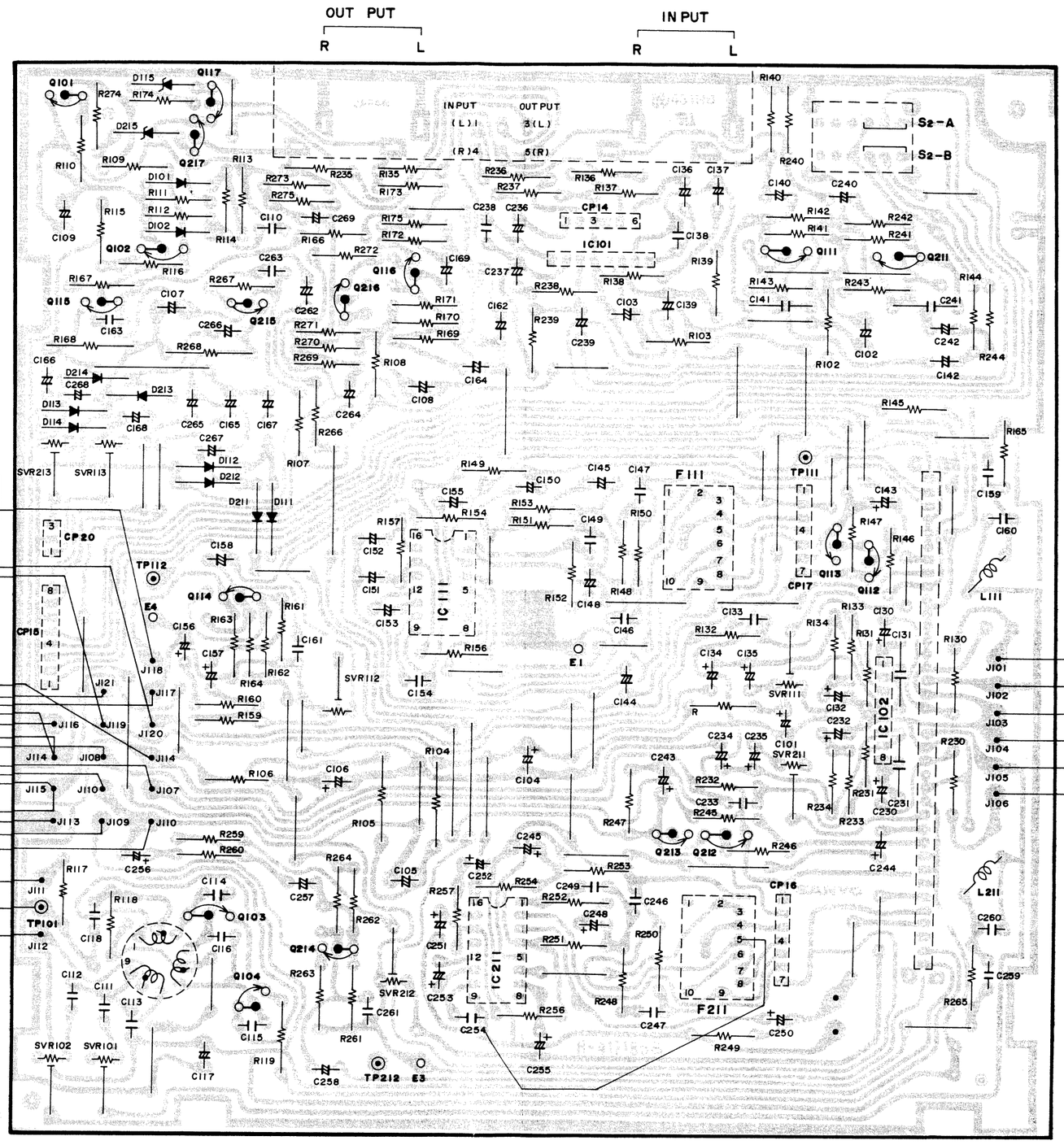
WIRING DIAGRAM

VR P.C.B. Bottom

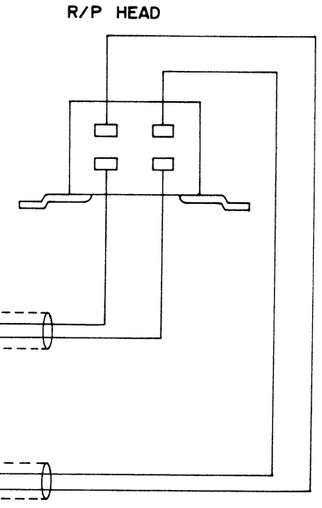




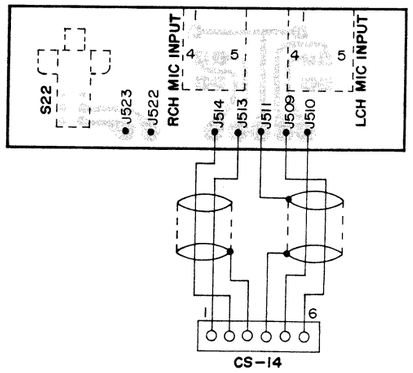
CASSETTE P.C.B. Bottom



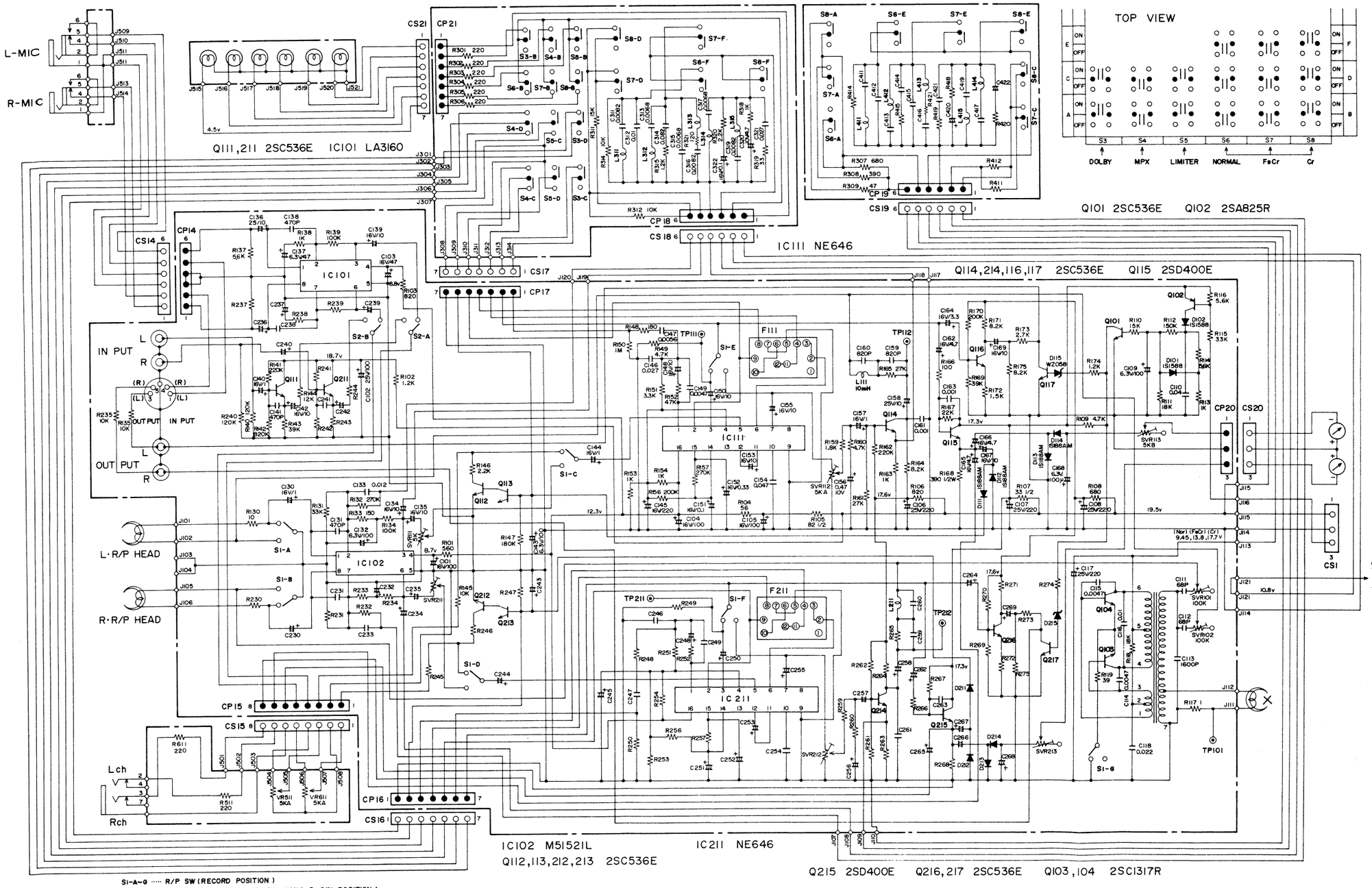
R/P HEAD



MIC P.C.B. Bottom



SCHEMATIC DIAGRAM



S1-A~G ····· R/P SW (RECORD POSITION)
S2-A~B ····· IN PUT SOURCE SELECT SW (MIC & DIN POSITION)

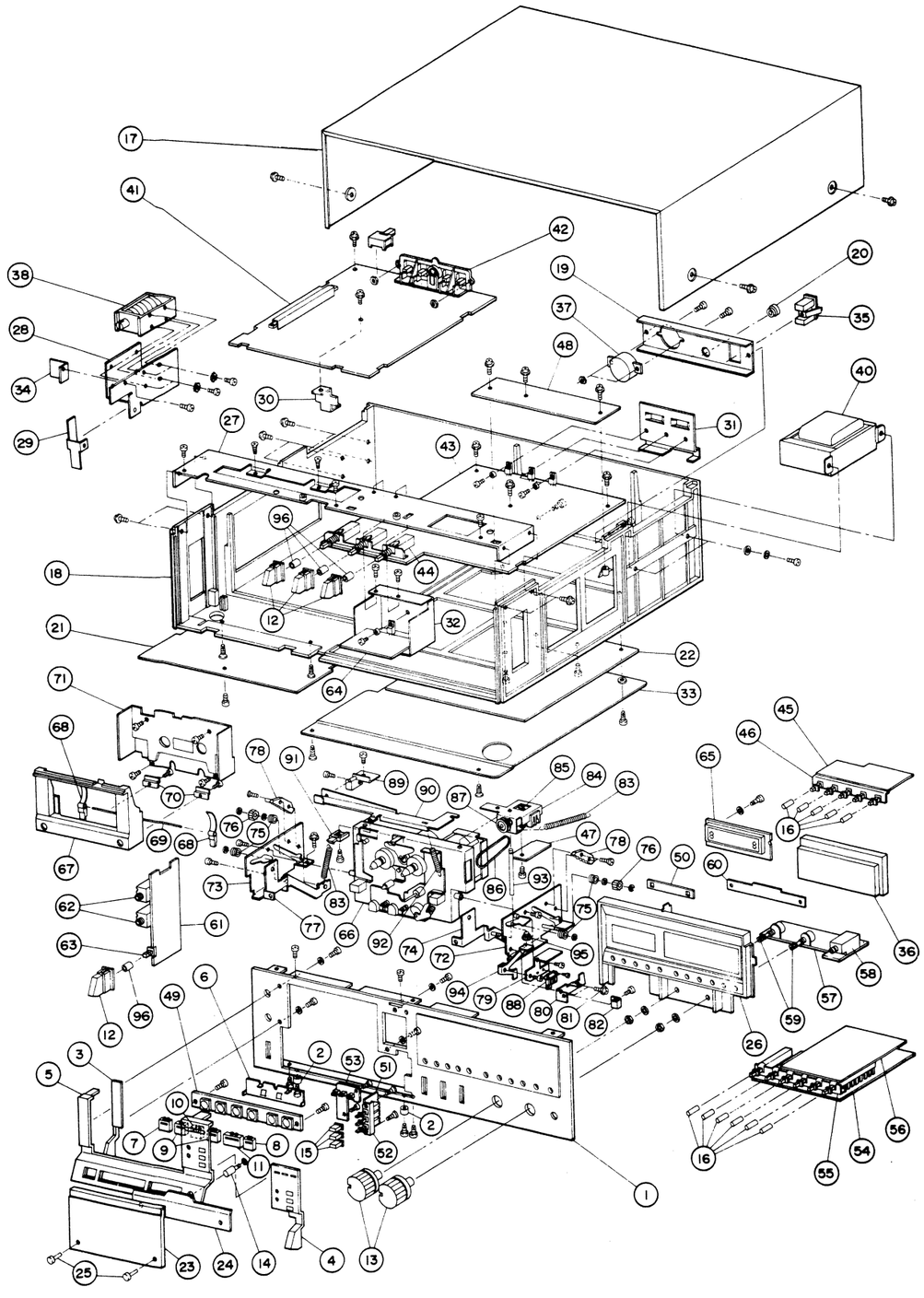
TRANSISTER	Q111,Q211	Q114,Q214	Q115,Q215	Q116,Q216	Q103,Q104			Q101		Q102	
					FeZrO2	FeCr	CrO2	MUTING ON	MUTING OFF	MUTING ON	MUTING OFF
BASE VOLTAGE	14	1.8	12.8	2.6	0.4	0.33	0.26	0	0.7	17.2	16.4
COLLECTOR VOLTAGE	18.5	8.2	17.2	6.9	9.4	13.7	17.6	7.4	0	-0.5	17
EMITTER VOLTAGE	13.6	1.1	12.2	2.0	0.6	0.8	1.1	0	0	17.2	17

IC NO \ Pin NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC111, IC211 (V)	6.1	6.2	6.6	6.1	6	6.2	5.5	0	0	6.2	6.3	6.1	0	6.2	6	12.3
IC101 (V)	1.3	0.8	4	8.7	0	4	0.8	1.3								
IC102 (V)	1.2	0.7	3.0	8.6	0	2.7	0.7	1.2								

NOTES

1. ALL RESISTANCES ARE 1/4W, UNLESS NOTED OTHERWISE VALUES ARE IN OHMS. (k=10³, M=10⁶)
2. ALL CAPACITOR VALUES ARE IN μF. (p=10⁻⁶μF)
3. VOLTAGE READINGS TO COMMON GROUND ARE MEASURED WITH V.T.V.M UNDER NO SIGNAL.
4. THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY.

EXPLODED VIEW



PARTS LIST

Key No.	Ref. No.	Part No.	Description	Q'ty
PACKAGE PARTS				
		R-477945	Tag, AC cord	1
			Polyethylene bag, 100x240, AC cord	1
		R-357415	Polyethylene bag, Set	1
		R-4773276	Instruction book	1
			Polyethylene bag, 240x320, Instruction book	1
		R-4171847	Protector, Right & Left side, SEV/FSZ.	2
		R-4171985	Protector, Right & Left side, SCAN	
		R-4074352	Individual carton, SEV/FSZ	1
		R-4074390	Individual carton, SCAN	
ACCESSORY PARTS				
		R-S07176	Cassette tape	1
		R-S37231	DIN cord, 1.8m	1
CABINET APPEARANCE PARTS				
1		R-A73677	Front panel assembly	1
5		R-A73678	Cassette panel assembly	1
			Screw, Oval Hd., 3x8 B-tight	2
			Screw, Oval Hd., 3x12 B-tight	2
2		R-277494	Pipe, Front panel ~Cassette panel	2
3		R-3972510	Fix plastic board, Cassette panel	1
			Screw, Pan Hd., 2.6x6 P-tight	2
			Flat Washer, Metal, 2.6x7.5x0.5	2
4		R-3972551	Fix plastic board, Cassette panel	1
			Screw, Pan Hd., 2.6x6 P-tight	2
			Flat Washer, Metal, 2.6x7.5x0.5	2
6		R-1271698	Shield plate, Control P. C. B.	1
			Screw, Pan Hd., 2.6x8 B-tight	3
7		R-A73679	Knob assembly, REC	1
8		R-A73680	Knob assembly, PAUSE	1
9		R-A73681	Knob assembly, RWD/FF	2
10		R-A73682	Knob assembly, PLAY	1
11		R-A73683	Knob assembly, STOP	1
12		R-A73684	Knob assembly, POWER/TIMER/CLOCK/COUNTER	4
13		R-A73685	Knob assembly	2
14		R-277497	Knob, EJECT	1
		R-1570207	Spring, Eject knob	1
			Ring, E, ETWJ4	1
15		R-3972515	Knob, STANDBY	3
16		R-277499	Knob, Push switch	11
96		R-4171489	Cushion, POWER/TIMER/CLOCK/COUNTER knob	4
17		R-1271476	Top cover	1
			Tap. Screw, Pan Hd. with Washer "B", 3x8	4
18		R-A73739	Cabinet assembly	1
19		R-1271651	Metal bracket, Cabinet rear, SEV/FSZ	1
		R-1271699	Metal bracket, Cabinet rear, SCAN	
			Screw, Oval Hd., 3x8 B-tight	2
		R-1170738	Cover, Voltage select	1
			Screw, Pan Hd., 3x8	2
			Nut, Hex Hd., 3	2
20		R-447817	Eyelet, AC cord, SEV/FSZ	1
21		R-1271482	Shield plate, Amp. P. C. B.	1
			Screw, Pan Hd., 3x8 B-tight	2
22		R-1271483	Shield plate, LOGIC P. C. B.	1
			Screw, Pan Hd., 3x6 B-tight	4
23		R-A73687	Cassette lid assembly	1
24		R-277502	Decoration metal, Cassette lid	1
25		R-277503	Decoration screw, Cassette lid	2
		R-357099	Fixing gum of cord, AC cord, SEV/FSZ	1

Key No.	Ref. No.	Part No.	Description	Q'ty
			Screw, Pan Hd., 3x16 B-tight, SEV/FSZ	1
		R-377036	Bushing, AC cord, SCAN	1
CHASSIS MECHANICAL PARTS				
26		R-A73740	Chassis assembly	1
27		R-A73689	Metal bracket assembly, Chassis ~Mechanism	1
			Screw, Oval Hd., 3x8 B-tight	4
28		R-S871618	Metal bracket assembly, REC	1
			Screw, Pan Hd. with Washer, 3x8 B-tight	4
29		R-257187	Arm, REC	1
			E ring, ETWJ-2.5	1
		R-137119	Spring pin, Plunger ~Arm	1
30		R-1271479	Metal bracket, Amp. P. C. B.	1
			Screw, Pan Hd. with Washer, 3x10 B-tight	1
31		R-2672073	Heat sink, Transistor	1
		R-447195	Cushion, DIGITAL P. C. B.	1
32		R-1271680	Shield plate, LED	1
33		R-1271681	Shield plate, Cabinet bottom	1
34		R-237186	Metal bracket, REC Solenoid Stopper	1
			Screw, Pan Hd., 3x6 S-tight	1
		R-3971489	Label, Connector CS1	1
		R-3971490	Label, Connector CS2	1
		R-3971491	Label, Connector CS3	1
		R-3971492	Label, Connector CS4	1
		R-3971493	Label, Connector CS5	1
		R-3971495	Label, Connector CS7	1
		R-3971539	Label, Connector CS16	1
		R-3971540	Label, Connector CS17	1
		R-4773274	Label, Connector CS18	1
		R-4773275	Label, Connector CS19	1
		R-4773217	Label, Connector CS20	1
		R-4773218	Label, Connector CS21	1
		R-4773338	Label, Connector CP23	1
			Screw, Pan Hd. with Washer, 3x8 B-tight Power supply P. C. B. mtg.	1
			Screw, Pan Hd. with Washer, 3x8 B-tight Logic P. C. B. mtg.	4
			Screw, Pan Hd. with Washer, 3x10 B-tight SW P. C. B. mtg.	1
			Screw, Truss Hd. with Washer, 3x8 B-tight Illumination P. C. B. mtg.	2
CHASSIS ELECTRICAL PARTS				
35		R-S27324	AC socket, SEV/FSZ	1
		R-S27325	AC socket, SCAN	
		R-S37089-1	AC cord, SEV/FSZ	1
		R-S37227	AC cord, SCAN	
36		R-S57170	Indicator	1
37		R-S47222-1	Rotary switch, Voltage select	1
			Screw, Pan Hd., 3x8	2
			Nut, Hex Hd., 3	2
38		R-S17300a	DC solenoid, REC SW	1
			Screw, Pan Hd., 2.6x4 black	2
		R-S27298-11	Housing, 11P, CS6	1
		R-S27298-6	Housing, 6P, CS3, 7, 14, 18, 19, 23	6
		R-S27298-5	Housing, 5P, CS5	1
		R-S27298-7	Housing, 7P, CS16, 17, 21, 24	4
		R-S27298-3	Housing, 3P, CA1, 2, 20	3
		R-S27298-8	Housing, 8P, CS15	1
		R-247755	Terminal, Housing	96
		R-377046a-13	Housing, 13P, CS11	1
		R-257149	Terminal, Housing	13

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PARTS LIST

Key No.	Ref. No.	Part No.	Description	Q'ty
40		R-W77674	Power trans	1
			Tap. Screw, Pan Hd. with Washer "B", 4x14	2
			Nut, with Washer, 4	2
		R-377052-6	Housing, P. T	1
		R-377052-2	Housing, P. T	1
		R-257158	Terminal, Housing	8
		R-1271690	Metal bracket, Power supply P.C.B.	1
			Screw, Pan Hd. with Washer, 3x8 B-tight	3
		R-S37023	2P lug	1
		R-S3728	5P lug	1
65			Multi LED, SL2456	1
SEMICONDUCTORS				
	D40		Diode, 10D-1 or SM-1	1
RESISTORS (Resistors are of carbon type, ±10% allowance and ¼W unless otherwise noted.)				
	R78		220 ohm	1
	R77		Solid, 68 ohm, ±10%, ½W	1
			Screw, Pan Hd., 4x12	2
			Nut, Hex Hd., M4	2
			AC socket mtg.	
CASSETTE P. C. B. ASSEMBLY				
41		R-A73690	Circuit board assembly, Cassette	1
	S1-A~G	R-S47473	Slide switch	1
	S2-A~B	R-S47397	Slide switch	1
		R-W87011	OSC coil	1
42		R-S17289	Terminal plate	1
	F111,211	R-S17299	Filter	2
	L111,211	R-W1777	Biastrap coil	2
	SVR111, 211, 112, 212, 113, 213	R-R110729	Preset resistor, 5K	6
	SVR101, 102	R-R110723	Preset resistor, 100K	2
		R-237093	Eyelet lug	9
		R-S27207-3	Plug, 3P, CP20	1
		R-S27207-6	Plug, 6P, CP14	1
		R-S27207-7	Plug, 7P, CP16, 17	2
		R-S27207-8	Plug, 8P, CP15	1
SEMICONDUCTORS				
	IC101		Integrated circuit, LA3160	1
	IC102		Integrated circuit, M51521L	1
	IC111, 211		Integrated circuit, NE646	2
	Q111, 211, 112, 212, 113, 213, 114, 214, 117, 217, 116, 216, 101		Transistor, 2SC536 E	13
	Q103, 104		Transistor, 2SC1317R	2
	Q115, 215		Transistor, 2SD400 E	2
	Q102		Transistor, 2SA825 R	1
	D101, 102		Diode, 1S1588	2
	D111, 112, 211, 212, 113, 213, 114, 214		Diode, 1S188 AM	8
	D115, 215		Zener diode, WZ-058	2
RESISTORS				
	R102, 174, 274, 137, 237		Carbon, 1.2 K ohm, ±5%, ¼W (R25 type)	5
	R130, 230		Carbon, 10 ohm, ±5%, ¼W (R25 type)	2
	R104		Carbon, 56 ohm, ±5%, ¼W (R25 type)	1
	R166, 266		Carbon, 100 ohm, ±5%, ¼W (R25 type)	2
	R133, 233		Carbon, 150 ohm, ±5%, ¼W (R25 type)	2
	R148, 248		Carbon, 180 ohm, ±5%, ¼W (R25 type)	2
	R101		Carbon, 560 ohm, ±5%, ¼W (R25 type)	1
	R108		Carbon, 680 ohm, ±5%, ¼W (R25 type)	1
	R103, 106		Carbon, 820 ohm, ±5%, ¼W (R25 type)	2
	R113, 138, 238, 153, 154, 253, 254, 163, 263		Carbon, 1 K ohm, ±5%, ¼W (R25 type)	9
	R117		Carbon, 1 ohm, ±5%, ¼W (R25 type)	1
	R172, 272		Carbon, 1.5 K ohm, ±5%, ¼W (R25 type)	2
	R159, 259		Carbon, 1.8 K ohm, ±5%, ¼W (R25 type)	2
	R146, 246		Carbon, 2.2 K ohm, ±5%, ¼W (R25 type)	2
	R173, 273		Carbon, 2.7 K ohm, ±5%, ¼W (R25 type)	2
	R109, 149, 249, 160, 260		Carbon, 4.7 K ohm, ±5%, ¼W (R25 type)	5
	R114, 116		Carbon, 5.6 K ohm, ±5%, ¼W (R25 type)	2
	R164, 264, 171, 271, 175, 275		Carbon, 8.2 K ohm, ±5%, ¼W (R25 type)	6
	R135, 235, 136, 236, 145, 245		Carbon, 10 K ohm, ±5%, ¼W (R25 type)	6
	R144, 244		Carbon, 12 K ohm, ±5%, ¼W (R25 type)	2
	R110		Carbon, 15 K ohm, ±5%, ¼W (R25 type)	1
	R111, 118		Carbon, 18 K ohm, ±5%, ¼W (R25 type)	2
	R167, 267		Carbon, 22 K ohm, ±5%, ¼W (R25 type)	2
	R161, 261, 165, 265		Carbon, 27 K ohm, ±5%, ¼W (R25 type)	4
	R115, 131, 231		Carbon, 33 K ohm, ±5%, ¼W (R25 type)	3
	R143, 243, 169, 269		Carbon, 39 K ohm, ±5%, ¼W (R25 type)	4
	R152, 252		Carbon, 47 K ohm, ±5%, ¼W (R25 type)	2
	R134, 234, 139, 239		Carbon, 100 K ohm, ±5%, ¼W (R25 type)	4
	R112		Carbon, 150 K ohm, ±5%, ¼W (R25 type)	1
	R147, 247		Carbon, 180 K ohm, ±5%, ¼W (R25 type)	2
	R162, 262, 141, 241		Carbon, 220 K ohm, ±5%, ¼W (R25 type)	4
	R132, 232, 140, 240, 157, 257		Carbon, 270 K ohm, ±5%, ¼W (R25 type)	6
	R142, 242		Carbon, 820 K ohm, ±5%, ¼W (R25 type)	2
	R150, 250		Carbon, 1 M ohm, ±5%, ¼W (R25 type)	2
	R156, 256, 170, 270		Carbon, 200 K ohm, ±5%, ¼W (R25 type)	4
	R151, 251		Carbon, 3.3 K ohm, ±1%, ¼W (R25 type)	2
	R105		Solid, 82 ohm, ±10%, ½W	1
	R107		Fuse, 33 ohm, ±5%, ½W, ERG	1
	R168, 268		Solid, 390 ohm, ±10%, ½W	2
CAPACITORS				
	C114, 115, 149, 249		Mylar, 0.0047 mfd, ±5%, 50V	4
	C116		Mylar, 0.01 mfd, ±5%, 50V	1
	C147, 247		Mylar, 0.0056 mfd, ±5%, 50V	1
	C118		Mylar, 0.022 mfd, ±5%, 50V	1
	C133, 233		Mylar, 0.012 mfd, ±5%, 50V	2
	C146, 246		Mylar, 0.027 mfd, ±5%, 50V	2
	C154, 254		Mylar, 0.047 mfd, ±5%, 50V	2
	C161, 261, 163, 263		Mylar, 0.001 mfd, ±5%, 50V	4
	C110		Ceramic, 0.047 mfd, ±10%, 50V, F	1
	C111, 112		Ceramic, 68 pF, ±10%, 50V, F	2
	C138, 238		Ceramic, 470 pF, ±10%, 50V, F	2
	C131, 231, 141, 241		Ceramic, 470 pF, ±10%, 50V, SB	4
	C113		Styrol, 1600 pF, ±5%, 125V	1
	C159, 259, 160, 260		Styrol, 820 pF, ±5%, 50V	4
	C130, 230, 157, 257, 140, 240, 144, 244		Electrolytic 1 mfd/16V Alsicon	8
	C164, 264		Electrolytic 3.3 mfd/16V Alsicon	2
	C152, 252		Electrolytic 0.33 mfd/16V Alsicon	2
	C151, 251		Electrolytic 0.1 mfd/16V Alsicon	2
	C156, 256		Electrolytic 0.47 mfd/10V Alsicon	2
	C106, 107, 108, 117		Electrolytic 220 mfd/25V	4
	C102		Electrolytic 100 mfd/25V	1
	C136, 236, 158, 258		Electrolytic 10 mfd/25V	4
	C145, 245		Electrolytic 220 mfd/16V	2
	C101, 104, 105		Electrolytic 100 mfd/16V	3
	C103		Electrolytic 47 mfd/16V	1
	C155, 255, 153, 253, 167, 267, 142, 242, 134, 234, 169, 269, 148, 248, 135, 235, 150, 250, 139, 239		Electrolytic 10 mfd/16V	20
	C162, 262, 166, 266, 165, 265		Electrolytic 4.7 mfd/16V	6
	C109, 132, 232, 143, 243		Electrolytic 100 mfd/6.3V	5
	C137, 237		Electrolytic 47 mfd/6.3V	2
	C168, 268		Electrolytic 10 mfd/6.3V	2
MAIN LOGIC P. C. B. ASSEMBLY				
43		R-A73742	Circuit board assembly, Main Logic	1
44		R-S47452	Push switch, Display select	1
		R-S47478	Relay	1
		R-W87012	OSC coil	1
		R-S27207-11	Plug, 11P, CP6	1
		R-S27207-13	Plug, 13P, CP11	1

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PARTS LIST

Key No.	Ref. No.	Part No.	Description	Q'ty
		R-S27207-7	Plug, 7P, CP4, 24	2
		R-S27207-6	Plug, 6P, CP3, 7	2
		R-S27207-5	Plug, 5P, CP5	2
		R-S27207-3	Plug, 3P, CP1, 2	2
		R-S27206-2	Plug, 2P, CP13	1
		R-S27206-6	Plug, 6P, CP23	1
	SEMICONDUCTORS			
	IC1		Integrated circuit, μPD547C	1
	IC3		Integrated circuit, μA79M08	1
	Q2,6,7,8,9,10,11,25,46		Transistor, 2SC536 E	9
	Q3, 4, 5, 43, 47		Transistor, 2SA825	5
	Q27, 28, 30, 31		Transistor, 2SA733	4
	Q33, 34, 35		Transistor, 2SC1317S	3
	Q36, 37, 38		Transistor, 2SA719S	3
	Q39		Transistor, 2SC1645	1
	Q26, 29, 32		Transistor, 2SC1226	3
	Q45, 40, 42, 48		Transistor, 2SD313 E	4
	Q41, 44, 49		Transistor, 2SA659 E	3
	D48, 46		Diode, S2VC-10R	2
	D50		Diode, S2VC-10	1
	D8, 9, 10, 23, 24, 25, 26, 27, 28, 29, 30, 31, 45, 53		Diode, 1S1588	14
	D39, 41, 44, 32, 40		Diode, 10D-1 or SM1	5
	D42		Diode, EQA-01-11S	1
	D43		Diode, EQA-01-13	1
	D38		Diode, EQA-01-21	1
	RESISTORS			
	R7		Carbon, 5.6 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	R5, 6, 10, 12, 14, 16, 17, 18, 19, 20, 21, 42, 49, 51, 76		Carbon, 22 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	15
	R30, 31, 32, 33, 34, 35, 36, 43, 44, 47, 74		Carbon, 10 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	11
	R11, 13, 65		Carbon, 1 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	3
	R37		Carbon, 12 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	R38, 119		Carbon, 1.2 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	2
	R45, 54		Carbon, 47 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	2
	R46, 48, 50, 52, 64, 75		Carbon, 100 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	6
	R55, 56, 57, 59, 60		Carbon, 1.8 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	5
	R61, 68, 72, 23, 24, 25, 26, 27, 28, 29		Carbon, 2.2 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	10
	R67		Carbon, 56 ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	R15		Carbon, 2.7 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	R53, 62		Solid, 2.2 ohm, ±10%, $\frac{1}{2}$W	2
	R70		Solid, 180 ohm, ±10%, $\frac{1}{2}$W	1
	R66, 73		Fuse, 10 ohm, ±5%, $\frac{1}{2}$W	2
	R69		Fuse, 3.3 ohm, ±5%, $\frac{1}{2}$W	1
	R71		Fuse, 33 ohm, ±5%, $\frac{1}{2}$W	1
	R39		Metal oxide film, 27 ohm, ±5%, 3W	1
	R40		Cement, 82 ohm, ±10%, 5W	1
	RA-2, 3		Block Resistor 100 K ohmx5, ±10%, $\frac{1}{4}$W	2
	RA-1, 4, 5		Block Resistor 100 K ohmx8, ±10%, $\frac{1}{4}$W	3
	CAPACITORS			
	C41, 42, 43		Mylar, 0.047 mfd, ±20%, 100V	3
	C2, 10, 26, 35, 36, 37, 38		Ceramic, 0.047 mfd, ±10%, 50V, F	7
	C9		Ceramic, 9 pF, ±10%, 50V, F	1
	C3,4,5,6,7,8,11,14		Ceramic, 0.01 mfd, ±10%, 25V, X	8
	C31, 32, 39, 40		Ceramic, 4700 pF, ±20%, 400V	4
	C12		Electrolytic 22 mfd/25V	1
	C18		Electrolytic 10 mfd/25V	1
	C17, 27		Electrolytic 3300 mfd/25V	2
	C21		Electrolytic 1000 mfd/35V	1
	C15, 16, 22, 25		Electrolytic 2200 mfd/25V	4
	C28		Electrolytic 4700 mfd/16V	1
	C20		Electrolytic 1000 mfd/16V	1
	C23, 30, 44		Electrolytic 220 mfd/16V	3
	C24, 29, 45		Electrolytic 10 mfd/16V	3
	C13		Electrolytic 22 mfd/10V	1
	C19		Electrolytic 220 mfd/25V	1
	C33, 34		Electrolytic 100 mfd/16V	2
	CONTROL P. C. B. ASSEMBLY			
45		R-A73692	Circuit board assembly, Control	1
46		R-S47454	Push switch, Hour setting	1
	SEMICONDUCTORS			
	D11, 12, 13, 15, 16		Diode, 1S1588	5
	COUNTER P. C. B. ASSEMBLY			
47		R-A73693	Circuit board assembly, Counter	1
	SEMICONDUCTORS			
	IC2		Integrated circuit, DN838	1
	Q1		Transistor, 2SC536 E	1
	RESISTORS			
	R1		Carbon, 22 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	R2		Carbon, 10 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	1
	CAPACITORS			
	C1		Mylar, 0.0047 mfd, ±5%, 50V	1
	POWER SUPPLY P. C. B. ASSEMBLY			
48		R-A73741	Circuit board assembly, Power supply	1
		R-1271647	Eyelet lug	6
		R-W6752	Choke coil, 800 μH	2
		R-S47485 or R-S47485-1	Relay	1
		ENB461D-14A	Z trap	1
		R-S17024	Fuse holder	16
		R-S17235	Fuse 5.2 ϕx20 2A 250V SEMKO. CB	3
		R-S17214	Fuse 5.2 ϕx20 630mA 250V SEMKO	2
		R-S17185	Fuse 5.2 ϕx20 2A 250V SEMKO	2
		R-S17286	Fuse 5.2 ϕx20 3.15A 250V SEMKO	1
	KEY SW P. C. B. ASSEMBLY			
49		R-A73695	Circuit board assembly, Key SW	1
	S9-A-D	R-S47459	Key switch	6
	SEMICONDUCTORS			
	D17, 18, 19, 20, 21, 22		Diode, 1S1588	6
	DIGITAL P. C. B. ASSEMBLY			
50		R-A73743	Circuit board assembly, Digital	1
	SEMICONDUCTORS			
	D34, 35		LED, SLP237 B	2
	SW P. C. B. ASSEMBLY			
51		R-A73697	Circuit board assembly, Switch	1
52		R-S47455	Push switch, Stanby	1
	SEMICONDUCTORS			
	D1, 2		Diode, 1S1588	2
	ILLUMINATION P. C. B. ASSEMBLY			
53		R-A73698	Circuit board assembly, Illumination	1
	SEMICONDUCTORS			
	D3, 4		LED, SLP237 B	2
	D5		LED, SLP137 B Red	1
	D6		LED, SLP214 Green	1
	D7		LED, SLP114 Red	1
	RESISTORS			
	R3, 4		Carbon, 1 K ohm, ±5%, $\frac{1}{4}$W (R25 type)	2
	L-CH REC EQ P. C. B. ASSEMBLY			
54		R-A73699	Circuit board assembly, L-CH REC EQ	1
55	S3, 4, 5, 6, 7, 8	R-S47451	Push switch	1
		R-377049-6	Plug, 6P, CP18	1

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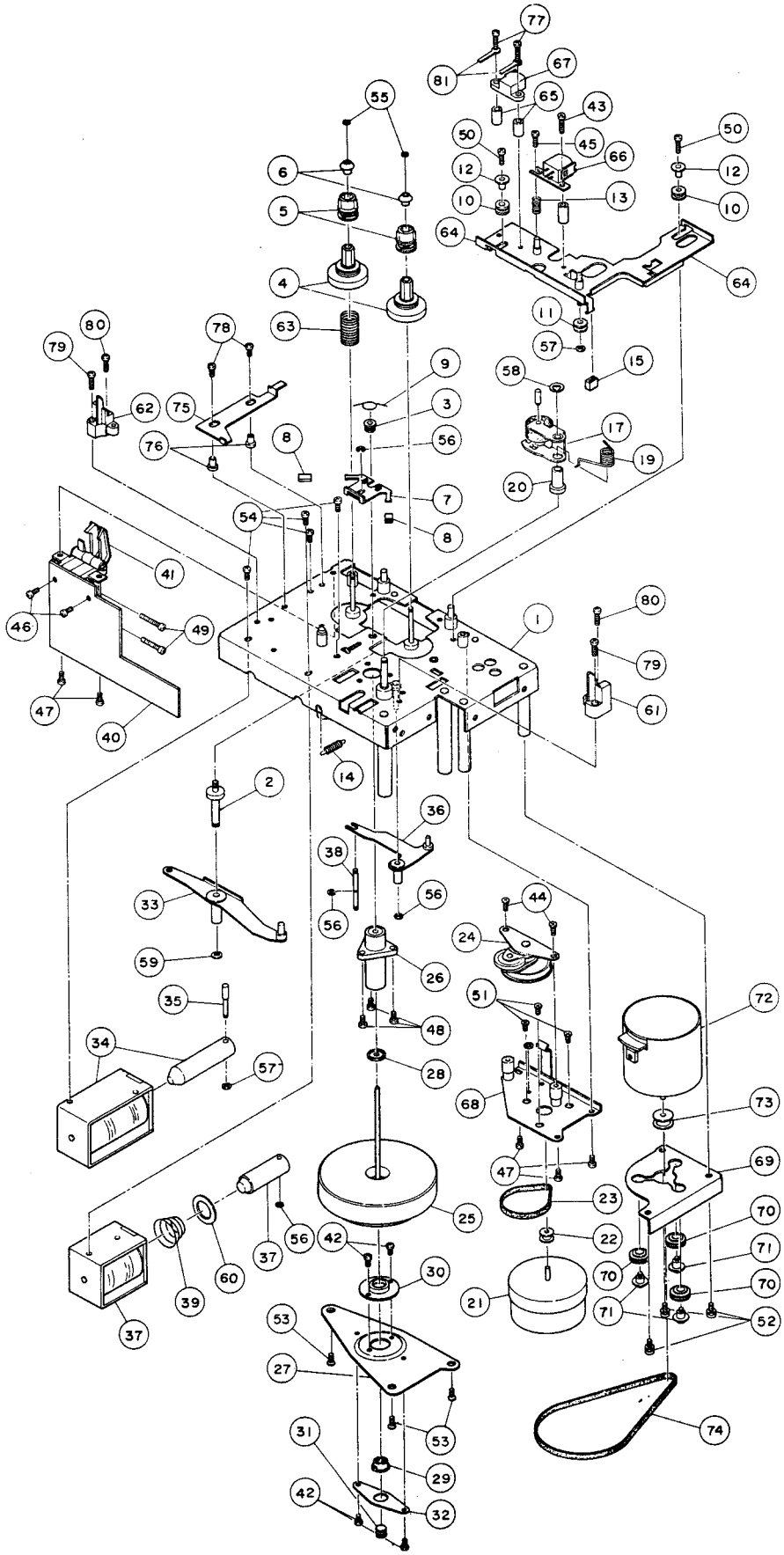
PARTS LIST

Key No.	Ref. No.	Part No.	Description	Q'ty
		R-377049-7	Plug, 7P, CP21	1
	L311, 312, 313, 314, 315	R-W6724	Coil, 10 mH	5
	RESISTORS			
	R301, 302, 303, 304, 305, 306		Carbon, 220 ohm, ±5%, ¼W (R25 type)	6
	R311		Carbon, 15 K ohm, ±5%, ¼W (R25 type)	1
	R312, 314		Carbon, 10 K ohm, ±5%, ¼W (R25 type)	2
	R315		Carbon, 1.2 K ohm, ±5%, ¼W (R25 type)	1
	R318		Carbon, 1 K ohm, ±5%, ¼W (R25 type)	1
	R319		Carbon, 33 ohm, ±5%, ¼W (R25 type)	1
	R320		Carbon, 2.2 K ohm, ±5%, ¼W (R25 type)	1
	CAPACITORS			
	C311, 319		Mylar, 0.0082 mfd, ±5%, 50V	2
	C312		Mylar, 0.01 mfd, ±5%, 50V	1
	C313, 317		Mylar, 0.0068 mfd, ±5%, 50V	2
	C314		Mylar, 0.082 mfd, ±5%, 50V	1
	C315		Mylar, 0.018 mfd, ±5%, 50V	1
	C316		Mylar, 0.0056 mfd, ±5%, 50V	1
	C321		Mylar, 0.027 mfd, ±5%, 50V	1
	C320		Electrolytic 4.7 mfd/10V	1
	C322		Electrolytic 0.1 mfd/16V Alsicon	1
	R-CH REC EQ P. C. B. ASSEMBLY			
56		R-A73700	Circuit board assembly, R-CH REC EQ	1
		R-377049-6	Plug, 6P, CP19	1
	L411, 412, 413, 414, 415	R-W6724	Coil, 10 mH	5
	RESISTORS			
	R307		Carbon, 680 ohm, ±5%, ¼W (R25 type)	1
	R308		Carbon, 390 ohm, ±5%, ¼W (R25 type)	1
	R411		Carbon, 15 K ohm, ±5%, ¼W (R25 type)	1
	R412, 414		Carbon, 10 K ohm, ±5%, ¼W (R25 type)	2
	R415		Carbon, 1.2 K ohm, ±5%, ¼W (R25 type)	1
	R418		Carbon, 1 K ohm, ±5%, ¼W (R25 type)	1
	R419		Carbon, 33 ohm, ±5%, ¼W (R25 type)	1
	R309		Fuse, 47 ohm, ±5%, ¼W	1
	R420		Carbon, 2.2 K ohm, ±5%, ¼W	1
	CAPACITORS			
	C411, 419		Mylar, 0.0082 mfd, ±5%, 50V	2
	C412		Mylar, 0.01 mfd, ±5%, 50V	1
	C413, 417		Mylar, 0.0068 mfd, ±5%, 50V	2
	C414		Mylar, 0.082 mfd, ±5%, 50V	1
	C415		Mylar, 0.018 mfd, ±5%, 50V	1
	C416		Mylar, 0.0056 mfd, ±5%, 50V	1
	C421		Mylar, 0.027 mfd, ±5%, 50V	1
	C420		Electrolytic 4.7 mfd/10V	1
	C422		Electrolytic 0.1 mfd/16V Alsicon	1
	VR P. C. B. ASSEMBLY			
57		R-A73701	Circuit board assembly, VR	1
58		R-S27210a	Headphone Jack	1
59		R-R1167232-1	Variable resistor, 5K-A	2
	T511, 611	R-W6745	Transformer	2
	PL P. C. B. ASSEMBLY			
60		R-A73702	Circuit board assembly, PL	1
		R-S17296	Pilot lamp, 5V 30 mA	6
	MIC P. C. B. ASSEMBLY			
61		R-A73703	Circuit board assembly, Mic	1
62		R-S27209a	Mic jack	2
63		R-S47453	Push switch, Power	1
	DISPLAY DRIVE P. C. B. ASSEMBLY			
64		R-A73704	Circuit board assembly, Display drive	1
	SEMICONDUCTORS			
	Q12, 13, 14, 15, 16, 17, 18		Transistor, 2SC1815Y	7

Key No.	Ref. No.	Part No.	Description	Q'ty
	Q19, 20, 21, 22, 23, 24		Transistor, 2SC1645	6
	Q48		Transistor, 2SD313E	1
	Q49		Transistor, 2SA659E	1
	D52		Diode, EQA-01-10R	1
	RESISTORS			
	R79, 80, 81, 82, 83, 84, 85		Carbon, 120 ohm, ±5%, ¼W (R25 type)	7
	R86		Carbon, 2.2 K ohm, ±5%, ¼W (R25 type)	1
	R87		Fuse, 3.3 ohm, ±5%, ½W	1
	CAPACITORS			
	C44		Electrolytic 220 mfd/16V	1
	C45		Electrolytic 10 mfd/16V	1
	CASSETTE MECHANISM PARTS			
66		R-S97071	Cassette mechanism complete	1
67		R-A73717	Cassette case assembly	1
68		R-3972492	Fix plastic board, Cassette case	2
69		R-1570131	Shaft, Fix plastic board	1
70		R-1171192	Metal bracket, Shaft	2
			Tap. Screw, Flat Hd., 2.6x6	2
71		R-A73718	Cassette base assembly	1
			Screw, Pan Hd., 2.6x6	2
			Tap. Screw, Pan Hd., 2x10	2
72		R-S871627a	Metal bracket assembly, right side	1
			Screw, Pan Hd., 3x14 S-tight	2
73		R-S871628	Metal bracket assembly, left side	1
			Screw, Pan Hd., 3x14 S-tight	2
74		R-S871629	Lever assembly, Right	1
75		R-3972493	Roller, Lever	2
76		R-3971979a	Gear, Soft eject	1
			Fhrust Washer, Metal, 3.5x0.25	6
			E ring, E2.5	3
77		R-S871630	Lever assembly, Left	1
75		R-3972493	Roller, Lever	2
76		R-3971979a	Gear, Soft eject	1
			Thrust Washer, Metal, 3.5x0.25	6
			E ring, E2.5	3
78		R-3972491	Luck, Soft eject	2
			Screw, Flat Hd., 3x12	4
79		R-1271472	Metal bracket, Snap switch	1
			Screw, Pan Hd., 2.6x4	2
80		R-1171193	Lever, Eject	1
81		R-147046	Special screw, Lever mtg.	2
82		R-1271473	Metal bracket, Eject lever	1
			Tap. Screw, Pan Hd., 2.6x4	2
83		R-1570208	Coil spring, Right & Left lever	2
84		R-A73719	Metal bracket complete	1
			Tap. Screw, Oval Hd., 3x6	1
85		R-S871626	Pulley assembly	1
86		R-4470093	Belt, Counter	1
87		R-3972496	Pulley, Belt	1
		R-1570200	Shaft, Pulley	1
88		R-S47466	Snap switch	1
			Screw, Pan Hd., 2x8	2
89		R-S871666a	Metal bracket assembly, Case stopper arm	1
			Tap. Screw, Oval Hd., 3x6	2
90		R-1271637	Lever, Case stopper	1
			Thrust Washer, Metal, 3x0.25	1
			E ring, E2	1
91		R-3972671	Fix plastic board, Case stopper	1
			Screw, Flat Hd., 2.6x6 S-tight	
92		R-1570206	Coil spring, Arm	1
93		R-1570231	Shaft, Arm	1
94		R-1271635	Arm, Eject	1
95		R-1570241	Coil spring, Eject arm	1

NOTES : 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

EXPLODED VIEW (CASSETTE MECHANISM)



PARTS LIST (CASSETTE MECHANISM)

Key No.	Ref. No.	Part No.	Description	Q'ty
			CASSETTE MECHANISM (R-S97071)	
1		1257 01 81	Chassis assembly	1
2		1240 01 10	Pull arm shaft	1
3		1240 01 11	Pull arm nut	1
4		1240 02 01	Reel disk	2
5		1240 02 02	Reel feather	2
6		1240 02 03	Reel cap	2
7		1240 03 01	Brake arm	1
8		1199 16 03	Brake shoe	2
9		1240 03 02	Brake arm spring	1
10		1240 04 07	Guide roller A	2
11		1240 04 08	Guide roller B	1
12		1240 04 09	Guide collar	2
13		48 04 08	RPH spring	1
14		1240 04 12	Head panel spring	1
15		1240 04 10	Panel stopper	1
17		1240 05 02	Pinch roller assembly	1
19		1240 05 04	Pinch roller spring	1
20		1240 05 05	Arm collar	1
21		1240 06 18	Drive motor	1
22		1240 06 19	DM pulley	1
23		1240 06 20	D belt	1
24		1240 06 91	Sub plate assembly	1
25		1240 07 01	Flywheel capstan	1
26		1240 07 02	Flywheel metal	1
27		1240 07 03	FL hold plate assembly	1
28		1240 07 04	FL washer	1
29		1240 07 05	FL gird	1
30		1240 07 06	FL holder	1
31		1240 07 07	FL adjust screw	1
32		1240 07 09	FL gird spring plate	1
33		1240 08 81	Pull arm assembly	1
34		1240 08 04	Pull plunger	1
35		1240 08 09	Plunger shaft (P)	1
36		1240 08 82	Lock arm assembly	1
37		1240 08 08	Lock plunger	1
38		1240 08 10	Plunger shaft (L)	1
39		1240 08 11	Lock plunger spring	1
40		1240 10 01	PCB assembly	1
41		1240 10 91	Switch assembly	1
42			Screw, M2x4 TAMS	4
43			Screw, M2x5	1
44			Screw, M2x5 black	2
45			Screw, M2x6	1
46			Screw, M2x3 BINA	2
47			Screw, M2.3x4 TAMS	5
48			Screw, M2.3x6 TAMS	3
49			Screw, M2.3x22	3
50			Screw, M2.3x8	2
51			Screw, M2.6x3 F·H	6
52			Screw, M2.6x5 TAMS	3
53			Screw, M2.6x5 F·H	2
54			Screw, M3x4	4
55			E ring, ϕ1.2 black	2
56			E ring, ϕ1.5	4
57			E ring, ϕ2	2
58			E ring, ϕ2.5	2
59		1240 07 08	Oil stop washer	1
60		1240 08 12	Plunger washer	1
61		1240 01 12	Cassette guide R	1
62		1240 01 13	Cassette guide L	1
63		1240 02 05	Back tension spring	1
64		1257 04 81	Head panel assembly	1
65		1240 04 04	EH collar	2
66		R-S07299	Record/Playing head	1
67		R-S07218	Erasing head	1
68		1257 06 81	Base plate assembly	1
69		1257 09 01	Motor bracket	1
70		588 09 10	Motor rubber	3
71		1200 12 01	Collar screws	3
72		VFA-2R	Motor	1
73		1240 09 03	Motor pulley	1
74		1240 09 05	M belt	1
75		1240 10 07	Panel lock plate	1
76		1240 10 08	Lock plate collar	2
77			Screw, M2x14	2
78			Screw, M2.3x4 BIND	2
79			Screw, M2.3x8	2
80			Screw, M2.3x12 black	2
81		03 13 07	Cord clamp	2

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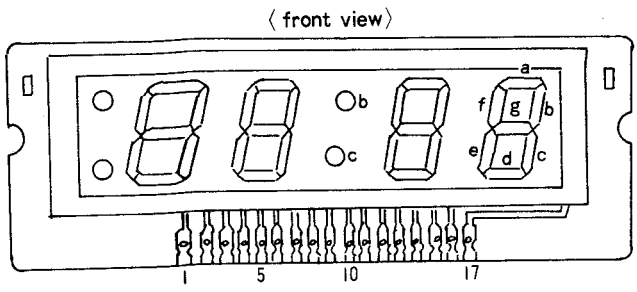
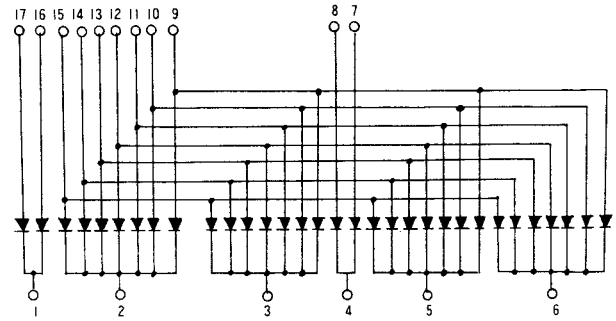
Multiple Light Emitting Diode Display, SL2456





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